Claims

1. A method for conjugating a maytansinoid to an antibody comprising the steps of:

a. reacting a disulfide-containing linker with the antibody at about pH 5.0 to about pH 8.0 to form a modified antibody;

b. removing unreacted linker from the modified antibody by tangential flow filtration;

c. conjugating the modified antibody with the maytansinoid at about pH 6.0 to about pH 6.5 in a solvent comprising dimethylacetamide; and

d. purifying the modified antibody-maytansinoid conjugate by ion exchange chromatography.

2. A method for conjugating a maytansinoid to an antibody comprising the steps of:

a. reacting a disulfide-containing linker with the antibody at about pH 5.0 to about pH 8.0 to form a modified antibody;

b. removing unreacted linker from the modified antibody by tangential flow filtration;

c. conjugating the modified antibody with the maytansinoid at about pH 6.0 to about pH 6.5 in a solvent comprising acetonitrile; and

d. purifying the modified antibody-maytansinoid conjugate by ion exchange chromatography.

3. The method of claim 1 or 2 where the maytansinoid is DM1.

4. The method of claim 1 or 2 where the linker is SPP.

5. The method of claim 1 or 2 where the maytansinoid is DM1 and the linker is SPP.

6. The method of claim 1 or 2 further comprising the step of:

e. formulating the modified antibody-maytansinoid conjugate.

7. The method of claim 1 or 2 wherein the ion exchange chromatography is performed on a ceramic hydroxyapatite column.

8. The method of claim 1 or 2 wherein the ion exchange chromatography is performed on SP-Sepharose.

9. An antibody-maytansinoid conjugate prepared by the method of claim 1 or 2.